

CUSHING & JAMMALLO, INC.

August 31, 2004

Mary Gardner
Massachusetts Department of Environmental Protection
627 Main Street
Worcester, Massachusetts 01608

Re: Response to Notice of Noncompliance
Former Empire Cleaners, 211 West Main Street, Ayer, Massachusetts
Release Tracking Number 2-14537
NON-CE-04-3076

Dear Ms. Gardner:

This letter provides the written response required in the Notice of Noncompliance issued by the Massachusetts Department of Environmental Protection (DEP) to Richard Cushing for activities conducted at the site located at 211 West Main Street, Ayer, Massachusetts (NON-CE-04-3076). The Noncompliance Summary, included in the NON, identified actions to be taken in order to return to compliance with 310 CMR 40.0000. These include:

- Submit a written statement describing the events and conditions which led to the LSP Opinion represented by the submittal of the original Phase I Report/Numerical Ranking identifying the site as a Tier IB site;
- Explain the implications of the noncompliance described in the NON;
- Explain the steps to be taken to prevent such noncompliance in the future.

The assessment activities conducted at the 211 West Main Street site were conducted by Ducharme & Wheeler, Inc under my supervision. Ducharme & Wheeler was retained by the LeMack Realty Trust as a result of a Notice of Responsibility sent to them in November 2002. The Notice of Responsibility was the result of a Downgradient Property Status submittal submitted to the DEP in May 2002 for the identification of tetrachloroethene (PCE) identified in groundwater samples collected on the 211 West Main Street property. The Notice of Responsibility directed the LeMack Realty Trust to submit a Phase I Report to the DEP within one year of the effective date of the Notice of Responsibility, November 8, 2003.

Ducharme & Wheeler conducted assessment activities aimed at determining the extent of the release of PCE. These included: the installation of additional borings and groundwater monitoring wells to assess extent of contamination in soil and groundwater and the installation of a series of soil gas monitoring points to assess the potential for vapor migration into the building located on site.

85 CONSTITUTION LANE, SUITE 3B1, DANVERS, MASSACHUSETTS 01923
TEL. (978) 774-7224 / FACSIMILE (978) 774-7292

SCANNED 9/11/04
K484

DEP - 2004

SEP 1 - 2004

SEP 1 - 2004

In September 2003, Ducharme & Wheeler received soil gas analytical data for conditions at the site. Since neither Cushing & Jammallo nor Ducharme & Wheeler are qualified to render opinions related to the interpretation of soil gas data as it relates to possible exposures and associated potential risks, Ducharme & Wheeler secured the services of O'Reilly, Talbot & Okun Associates, Inc. of Westborough (OTO) to render an opinion on the soil gas data. OTO was asked to determine whether the soil gas conditions (PCE concentration of 2,400,000 $\mu\text{g}/\text{m}^3$) could represent an imminent hazard for occupants of the building at the site.

OTO provided a verbal interpretation in October 2003. Their response was that an imminent hazard did not appear to exist for the conditions at the site but that conditions could represent a possible long-term exposure to occupants of the building. In discussions with OTO about the data, we agreed that further sampling of both soil gas and indoor air was warranted as part of Phase II activities.

In January 2004, Ducharme & Wheeler submitted a Phase I Report for the site including the preparation of a Numerical Ranking Scoresheet. The Numerical Ranking for the site conditions was determined to be 462 corresponding to a Disposal Site Classification of Tier IB. Based on my discussions with OTO, my understanding at the time was that the Air Exposure Pathway score of 100 points was appropriate since no analytical data existed characterizing indoor air concentration. My current understanding is that the Air Exposure Pathway should have been scored 200 points because of the reasonable likelihood that PCE would be identified in the indoor air.

On February 3, 2004, DEP contacted me and requested the collection of indoor air samples at the on site building to determine possible exposures to PCE. At the time of the request, no one emphasized the need to collect the samples on an expedited basis. For that reason, samples were collected as the Ducharme & Wheeler work schedule allowed, on February 10-11, and the samples were submitted to the analytical laboratory for a standard turnaround (usually 5-7 business days). Air sample results were received on February 17 and forwarded to OTO of interpretation. On February 23, 2004, OTO submitted an imminent hazard evaluation concluding that conditions representing an imminent hazard did not exist at the site. The results of the imminent hazard assessment were provided to the DEP on February 24.

A letter from OTO outlining their position in the interpretation of the September 2003 soil gas data and the February 10, 2004 indoor air sampling data is provided as an attachment to this letter. OTO used a unit risk factor for inhalation of PCE that they obtained from USEPA Region II as opposed to the much more conservative DEP unit risk factor. This resulted in a much lower risk value calculated by OTO.

On March 8, 2004, the DEP informed me that the DEP did not agree with the interpretation of the analytical data concluding that an imminent hazard was not present at the site. At that

August 31, 2004

point, OTO was contacted for clarification on their interpretation and a second opinion was solicited from a second consultant qualified to render opinions in risk characterization. Based on the input from the second consultant, later that day I directed Ducharme & Wheeler to coordinate the evacuation of the building. I formally notified the DEP and the Town of Ayer Board of Health of the imminent hazard condition and coordinated Immediate Response Action activities with the DEP.

On April 9, 2004, a revised classification for the site was submitted to the DEP. The revised numerical ranking classified the site as Tier IA.

The implications of the noncompliance described in the NON is that the imminent hazard condition identified in March 2004 could have been identified earlier with the appropriate interpretation of the September soil gas data or the February 2004 indoor air data. While the September 2003 soil gas data did not identify an imminent hazard condition, the appropriate interpretation of the data could have focused assessment activities to more expeditiously identify the imminent hazard condition.

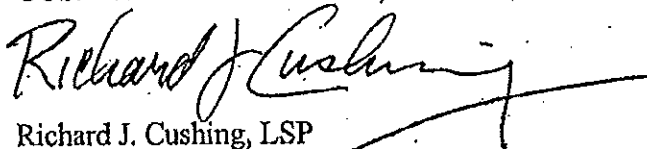
The steps I have taken to prevent future instances of noncompliance identified in the NON include the following:

- Evaluate conditions at all other sites for which I have responsibility to verify that an imminent hazard condition related to vapor transmission of PCE to an occupied building does not exist;
- Change my interpretation of the Massachusetts Contingency Plan such that when there is a reasonable likelihood that a site chemical is present in indoor air, it should be considered, for the purposes of a numerical ranking score, as a confirmed exposure pathway;
- Obtain additional background training on the interpretation of soil gas data and indoor air analytical data.

If you have any questions regarding the response to this NON, please contact me at (978) 774-7224.

Sincerely,

CUSHING & JAMMALLO, INC.



Richard J. Cushing, LSP
Principal

Department of Environmental Protection

4

August 31, 2004

cc: P. Wheeler, Ducharme & Wheeler, Inc.